

# I. ARTICLES

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## **Applied linguistics as a manifestation of exo-, meso- and endo-symbiosis**

*In multis partibus relucet totum*  
Nicolas of Cusa

**ABSTRACT.** An assumption is made that applied linguistics may be viewed as an outcome of an interplay of a dichotomy of endogenous and exogenous symbionts, mediated by important mesogenous symbionts acting jointly within the domain of language and communication. All of them form a system of bifurcations which may generally be called 'a flow tool-language design' or The Bifurcational Model of Symbiosis (BiMoS). In this model, bifurcations form a 'grammar of bifurcations' whose power is symbiotic in the overall functioning of language. Furthermore, the occurrence of the above mentioned types of symbionts on the language side allows for a division of 'linguolabourese' (or the whole 'life of language' as opposed to 'instrumentolabourese', or the whole 'life of tools') into three more or less distinct and interconnected areas of symbiosis: the exogenous area, the mesogenous area, and the endogenous area, respectively. The afore mentioned areas further justify a division of linguistics into three respective types: exogenous (exo-) linguistics, mesogenous (meso-) linguistics, and endogenous (endo-) linguistics. Their subdomains of interest vary but are highly interconnected, blended and synergistic. Applied linguistics is viewed here as belonging predominantly to (or taking theoretical and practical interest in) the mesogenous and endogenous areas of linguolabourese, though it is strongly supported by the underlying exogenous area.

**KEYWORDS:** exo-symbiosis; meso-symbiosis; endo-symbiosis; symbiotic node; bifurcation; exo-linguistics; meso-linguistics; endo-linguistics; instrumental opusology; linguistic opusology; Bifurcational Model of Symbiosis (BiMoS).

## 1. INTRODUCTION

Any properly constructed scientific endeavor must have an applied component as its integral part. Linguistics, especially in the multiplicity of its modern and contemporary guises, has managed to develop a very strong applied constituent. It has been exerted in two main 'flows', namely: (1) the instrumentality of natural language pedagogy, and (2) the instrumentality of natural language translatability, both based on the assumption that natural languages are similar (see e.g. Hockett, 1963). The two flows contribute in important practical respects to what may be called 'the whole life of language' which comprises, among others, its historical duration (phylogeny), its acquisition (ontogeny), and its highly diversified daily uses (communicative practice) through dynamically changing contexts, both intra- and inter-linguistic.

The whole life of language is referred to as 'linguolabourese' (cf. Puppel 2015; in print) whose nature is regarded here as highly symbiotic in the sense that it requires an interplay of three levels of symbiosis: the level of exo-symbiosis, the level of meso-symbiosis, and the level of endo-symbiosis, respectively (on symbiosis as a purely biological phenomenon, see e.g. Margulis 1991; Paracer and Ahmadjian 2000). The three levels jointly contribute to the generation of the totality of human linguistic experience. In order to grasp more fully the justification for the symbiotic design of language and, as a consequence, for the subject matter of applied linguistics proposed here, a brief presentation of the respective levels is in order. In it, a major role is assigned to bifurcations, both ascending and descending. Subsequently, the whole three-layered design of ascending/descending bifurcations is named The Bifurcational Model of Symbiosis (hence BiMoS). It is argued here that applied linguistics takes into concern the meso- and endo-symbiotic levels which are in persistent and mutualistic contact.

## 2. THE LEVEL OF EXO-SYMBIOSIS

The exo-symbiotic level of natural language is meant to be related with the following:

- (a) the grounding of language and of any particular natural language in a biological carrier – a human being (organism) – who is, in turn, an inhabitant of a much larger carrier, the Earth,
- (b) the grounding of every human being and language as such (including any particular natural language) in the semiosphere which, as has been customarily assumed, is indexical, iconic, and above all, symbolic,

and which is jointly responsible for the semiosis proper (see Peirce 1982-1989),

- (c) the grounding of language as such and of every local (ethnic/national) language, in particular, in the totality of the 'word' (logos). The nature of the latter is extended/bifurcated in a triangular manner, that is, in the triad 'Object-Concept-Name'. The bifurcation which is triggered from the 'Object' node, placed above the organism and its natural receptive power, has an ascending character.

On the exo-level of symbiosis, the presence of only one ascending bifurcation is postulated.

The level of exo-symbiosis may be graphically represented in the following way (Fig. 1):

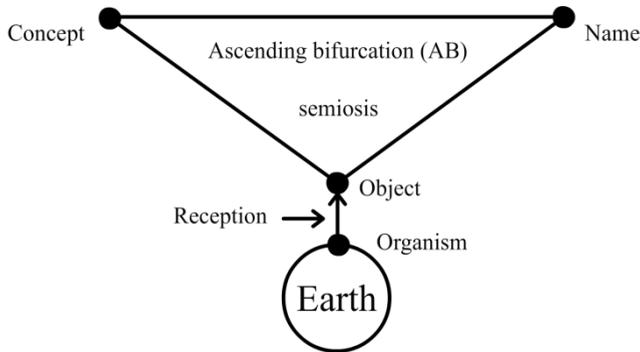


Fig. 1. The level of exo-symbiosis (where the liaison 'Earth' - 'Organism' - 'Object' constitutes the very essence of semiotico-semantic grounding and where the 'concept-name' axis of symbionts as the top axis serves as a launching pad for language meant as both a structure and a communication system)

It is assumed that the level of exo-symbiosis generates 'exo-linguistics' whose subject matter is focused on the semiotic-semantic foundations of language as a communication system.

### 3. THE LEVEL OF MESO-SYMBIOSIS

The meso-symbiotic level of natural language is the one whose bifurcations take off from the 'Concept - Name' axis and where oral language as constituting the core of the primary oral order of communication, based on the audio-vocal modality, and tools as constituting the core of the secondary

graphic order of communication, based on the visual-tactile modality, are connected. The tool (instrumental/technological) part of human linguistic experience is responsible for what has customarily been referred to as 'the graphic (i.e. both written and printed) domain of language use'. In this way, any natural language which has successfully attained the phase of graphic rendition is conserved in a dichotomous manner, that is, either via oral tradition or via graphic tradition.

Subsequently, the 'Use' symbiotic node serves as some kind of a large collider of the afore mentioned modalities as well as a synchronizer of appropriate contexts of language use, in turn, immersed in a symbiotic alignment of the communication orders mentioned above. Needless to say, every human communicator who has access to both communication orders may choose one of them or both at the same time for his/her communicative acts.

The conservation of any natural language (i.e. its retention) is accomplished in a continuous and complex social process of making 'linguistic deposits', or simply retaining all language manifestations (especially the graphic ones) in a boundless 'language opus pit'. The whole process may be studied by 'linguistic opusology' (see Puppel 2015).

At the same time, linguistic deposits are accompanied by a similarly continuous and complex social process of making tool/instrumental deposits', or simply retaining the continuously changing technologies in a boundless

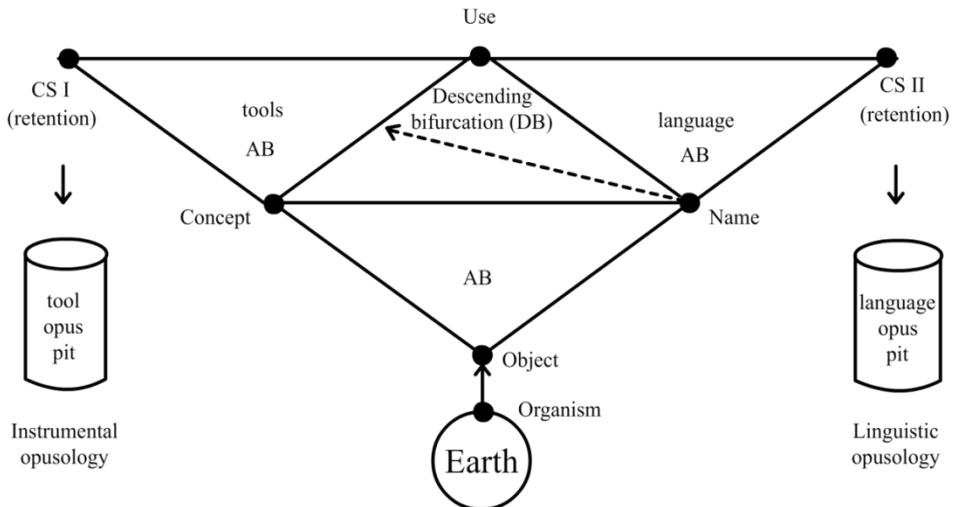


Fig. 2. The level of meso-symbiosis (where the centrally located 'Use' symbiotic node bifurcates in a descending manner to the 'Concept' and 'Name' nodes, and where the 'Concept' and 'Name' nodes bifurcate in the ascending manner to the 'Conservation I', 'Conservation II' and 'Use' symbiotic nodes, respectively)

'tool opus pit'. As in the case of linguistic opusology, it is postulated that the whole process may be studied by 'instrumental opusology'. On the meso-level of symbiosis, both ascending (AB) and descending bifurcations (DB) are postulated in the following ratio: two ascending bifurcations and one descending bifurcation.

The level of meso-symbiosis may be graphically represented in the following way (Fig. 2).

It is assumed that the level of meso-symbiosis generates 'meso-linguistics' whose subject matter is focused on the structure of language and its applications in verbal communication taking place either in one or in both communication orders. Depending on the number and type of communication orders used, singular or double retention processes are postulated to occur such that an oral manifestation, especially if it is a piece of literary or ritual value, is basically a memorial event transmitted within the 'oral culture' in which it is deposited. On the other hand, a graphic manifestation automatically becomes an opus which is transmitted within the 'graphic culture' and which is subject to a depositing process as described above.

#### 4. THE LEVEL OF ENDO-SYMBIOSIS

The endo-symbiotic level of natural language is the one which appears to be the most complex one and whose bifurcations take off from the 'CS I - Use - CS II' axis shown in Fig. 2 above. Moreover, the centrally located 'Use' symbiotic node is the one which is extended via an ascending bifurcation to the 'Contact' and 'Visage' nodes, respectively. In the framework proposed here, the life of language proper is limited to the areas delineated by the following symbiotic nodes: 'Object' - 'Concept' - 'Name' - 'Use' - 'Contact' - 'Visage' - 'Engineering'. This is shown in the following diagram (Fig. 3).

As can be seen on the diagram below, the system of the nodes is organized into some kind of a mirroring 'grammar' such that an ascending bifurcation from the 'Object' node to the 'Concept' and 'Name' nodes is followed by a descending bifurcation from the 'Use' node to be further mirrored by an ascending bifurcation from the 'Use' node to the 'Contact' and 'Visage' nodes and a subsequent descending bifurcation from the 'Engineering' node to the 'Contact' and 'Visage' nodes, respectively. In addition, both 'Contact' and 'Visage' symbiotic nodes are connected via descending bifurcations to the 'Use' node and the 'Conservation I' and 'Conservation II' nodes which lead to the tool-depositing and language-depositing areas, respectively.

It is assumed that the level of endo-symbiosis generates 'endo-linguistics' whose subject matter is focused on all the applications of the totality of

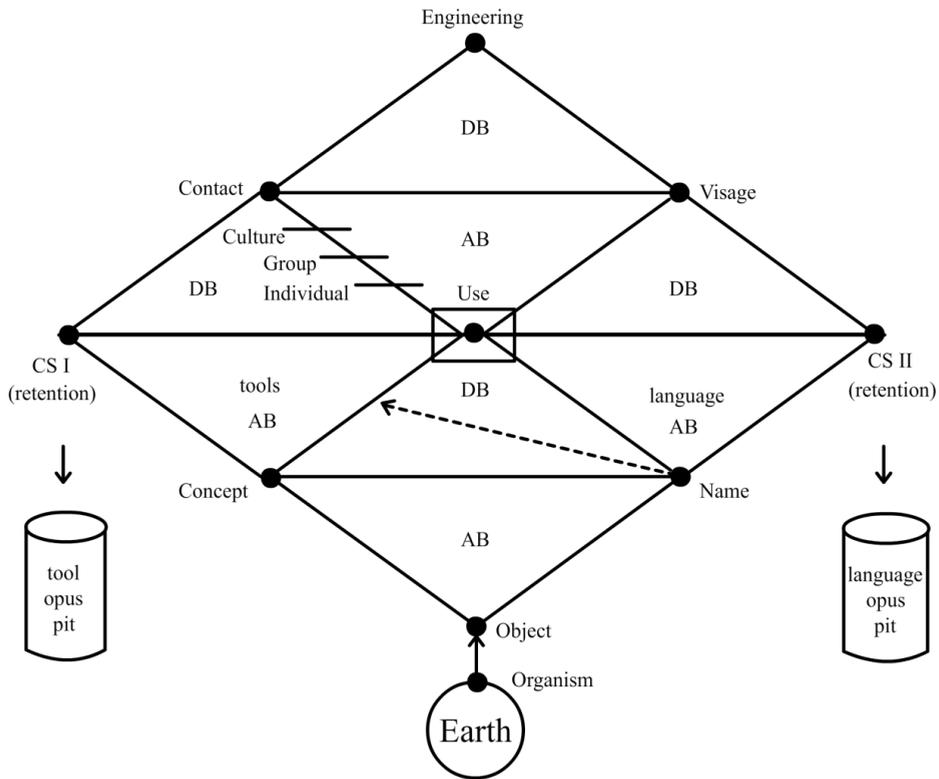


Fig. 3. The level of endo-symbiosis which bifurcates both in ascending and descending manners to the 'Contact', 'Visage' and 'Engineering' symbiotic nodes the presence of which is most fundamental for the life of language proper

the structure of a natural language in the symbiotic nodes of 'Use', 'Contact', 'Visage', and 'Engineering', that is, in context-determined communicative practice by means of language.

In addition to what has been said above, the 'Use' - 'Contact' axis is assumed to be further punctuated by the symbiotic subnodes of 'Individual use', 'Group use', and 'Culture use'. These subnodes are further responsible for the use of any natural language in the individual, social, and cultural contexts (milieus). It is their mutualistic symbiosis which is responsible for all that contributes to a more or less complete natural language use.

The top node of 'Engineering' is the one which is host to socially modified varieties of any natural language functioning under the dictates of appropriate domains of language use, be it formal, informal, professional, nonprofessional, etc. Its presence in the overall design of the BiMoS, as it has been outlined above, follows from the fact that language is never used in its

totality but is always provided in socially justified chunks (i.e. specialized extracts) and is necessarily tailored appropriately by the communicators who access the totality of its resources according to the changing needs and contexts, most preferably in contact conditions.

This is also true of the teaching/learning contexts in which the socially modified varieties of any natural language are subject to further didactic 'engineering' on the part of the foreign language instructors. The process of engineering consists in chunking (or extracting) any foreign language resources according to some scales of difficulty assigned to the so-called 'levels' of foreign language efficiency in order to be further applied in the linear progression of the teaching/learning process. In this way, the socially modified varieties of a natural language are engineered into what may be called 'the didactically modified' varieties of a natural language.

Subsequently, it is assumed here that the didactically modified varieties of a natural language are the most conspicuous manifestations of the applied context of language use, for it is in this context that both access to language resources and their supply are marshalled into didactically oriented chunks extracted from the entire body of language resources. These chunks are next supplied to foreign language learners in the process of foreign language teaching/learning, as has been more than amply demonstrated in a huge body of pertinent literature on second/foreign language didactics (see e.g. Levine and Phipps 2010; Sanz and Igoa 2012). Thus, the proposed sequence of extracting language material for didactic purposes is the following:

the totality of a particular language resources → the socially modified (i.e. context-sensitive) varieties of a particular language → the didactically modified (i.e. teaching/learning-sensitive) varieties of a particular language. It should be added that in this perspective, applied linguistics has assumed the shape of 'extractive linguistics'.

## **5. THE BIMOS DESIGN AND ITS RELATION TO THE GENERATION OF THE TYPES OF LINGUISTICS WITH SPECIAL REFERENCE TO APPLIED LINGUISTICS**

The BiMoS design proposed above may serve as a more or less complete design which may be approached by the science of language from the perspectives encapsulated in the 'grammar' of the respective (ascending and descending) symbiotic nodes thus allowing to generate a rich variety of theoretical orientations captured by the different types of linguistics that have emerged in the long course of development of linguistics as an autonomous

scientific endeavor. The different symbiotic nodes may be entered by the science of language thus creating different theoretical bents. This is shown in the following diagram (Fig. 4).

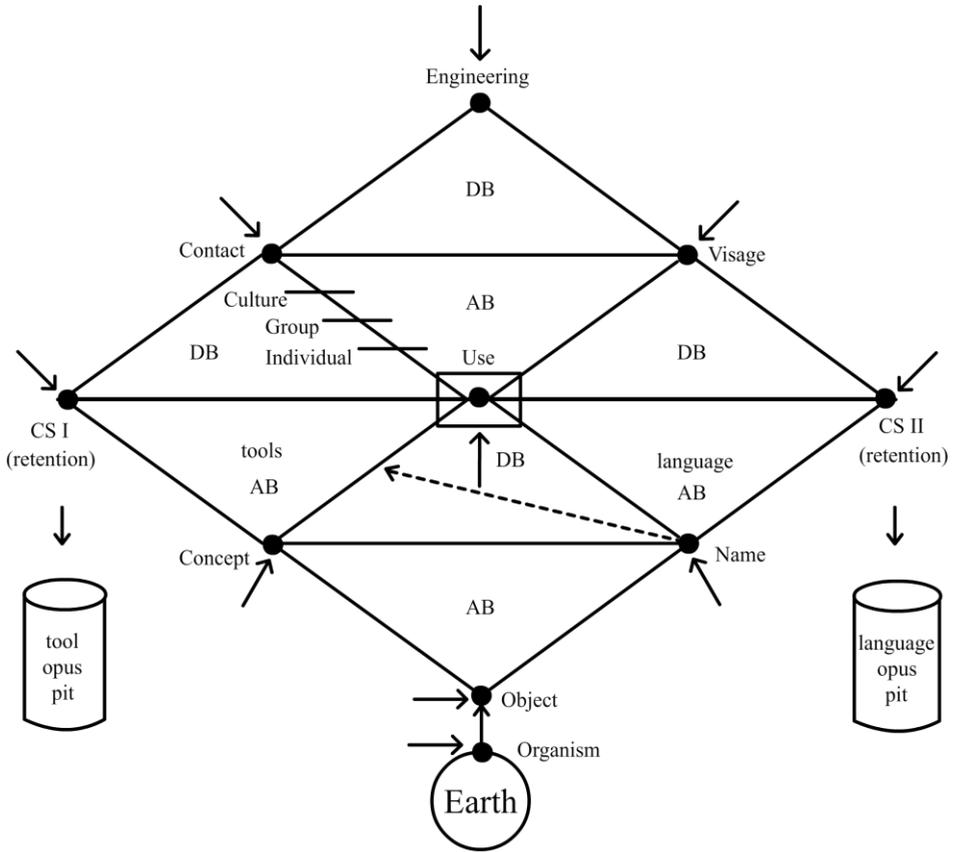


Fig. 4. The BiMoS design (where the arrows indicate the entrances to the respective symbiotic nodes thus generating within the science of language appropriate theoretical orientations)

Starting from the bottom of the diagram, the first entrance concerns the 'Organism' node, closest to the Earth as carrier, where the biological approach to language is generated, thus resulting in the following subdisciplines: psycholinguistics, biolinguistics, neurolinguistics. An entrance into the 'Object' node, in turn, results in the generation of the following perspectives: semiotics, mathematical linguistics. The entrance to the 'Concept' node results in the following approaches: psycholinguistics, semiotics, while the entrance to the 'Name' node generates the following rich variety of linguistic

perspectives: descriptive linguistics, theoretical linguistics, corpus linguistics, historical linguistics, lexicography. Upon entering the 'Conservation I' node linguistics obtains a strong technological orientation reflected in the concern for the role of technology in linguistic practice, whereas while entering the 'Conservation II' node the following perspectives are generated: ecology of language and communication (ecolinguistics), language planning, language policy. Entrance to the 'Use' node generates the following perspectives: a view of language as expressed through the primary oral order of communication, the secondary graphic order of communication, the combined oral-graphic (hybrid) order of communication, also media studies as dealing with the synergistic presence of these orders of communication are of importance. An entrance into the 'Contact' symbiotic node generates the following perspectives: comparative linguistics, contrastive linguistics, contact linguistics, sociolinguistics, pragmalinguistics, discourse studies. The 'Visage' node, in turn, generates the following perspectives: the aesthetic approach to language, stylistics. Finally, the 'Engineering' node generates the following important perspectives: foreign language pedagogy, extractive linguistics.

The relationship between the BiMoS design and the types of linguistic approaches generated at the respective nodes may be demonstrated by means of the following table (Table 1):

Table 1. The relationship between the BiMoS design and the types of linguistics generated in the respective symbiotic nodes

Node	Type of linguistics
The exo-level	<b>Exo-linguistics</b>
'Organism'	Psycholinguistics, biolinguistics, neurolinguistics
'Object'	Semiotics, mathematical linguistics
'Concept'	Psycholinguistics, semiotics
'Name'	Anthropolinguistics, descriptive linguistics, theoretical linguistics, corpus linguistics, historical linguistics, lexicography
The meso-level	<b>Meso-linguistics</b>
'Use'	The primary oral order of communication, the secondary graphic order of communication, the combined oral-graphic (hybrid) order of communication
'Conservation I'	Support of language use by technological means (tool opus pit), instrumental opusology
'Conservation II'	Ecolinguistics (the ecology of language and communication), language planning, language policy, language opus pit, linguistic opusology

Node	Type of linguistics
The endo-level	<b>Endo-linguistics</b>
'Contact'	Different types of contact linguistics, comparative linguistics, contrastive linguistics, sociolinguistics, pragmalinguistics, discourse studies
'Visage'	The aesthetic approach to language, stylistics
'Engineering'	Foreign language pedagogy, extractive linguistics

## 6. CONCLUSIONS

Within the model proposed above, applied linguistics appears to be placed firmly on the endo-linguistic level of analysis. This level of linguistic analysis is the level on which the applied aspects of the linguistic scientific endeavor are most conspicuous. The endo-level of linguistic analysis is a part of a hierarchic/heterarchic three-level design comprising the exo-level, meso-level, and endo-level, respectively, on which the system of nodes forms a symbiotic network of ascending and descending bifurcations. Moreover, the network may also be regarded as allowing for some kind of a grammar of bifurcations which jointly generates the totality of the life of language (or linguolabourese). In it, the totality of human linguistic experience, both collective and individual, is contained.

The concept of applied linguistics proposed here has an 'organismal' tint in that it approaches the totality of the life of language in a symbiotic manner which is characteristic of the science of biology. Such an approach is considered here as allowing to delineate the limits of applied linguistics more precisely compared to the treatment it has generally received thus far. More precisely, the particular nodes of 'Use', 'Contact', 'Visage' and 'Engineering' - which are involved in a symbiotic relationship - impose a universal pattern of linguistic-communicative activities on the one hand, and which may at the same time form an applied component of the BiMoS design, on the other. The inner transcendency of its component symbiotic nodes has been shown and properly emphasized.

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